STATE OF CALIFORNIA

PETE WILSON, Governor

AIR RESOURCES BOARD
2020 L STREET
BOX 2815
MENTO, CA 95812

March 29, 1996

Mr. Glenn K. Walker
President
Vapor Systems Technologies, Inc.
424 North Irwin Street
Dayton, Ohio 45403

#96-9

Dear Mr. Walker:

Approval of the VST Model VST-CV Safety Check Valve for use with the VSTaflex Full Length and VSTaflex Whip Hose Assemblies

You requested California Air Resources Board (CARB) certification of the VST Model VST-CV safety check valve for use with the VSTaflex inverted coaxial whip hose assembly.

The VST-CV safety valve is built in the vapor coupling of a VSTaflex inverted coaxial hose assembly. This unit was CARB certified for use with the full length VSTaflex inverted hose assembly on March 6, 1995, and is listed in Approval Letter #95-4. The VSTaflex inverted hose assembly was CARB approved on October 19, 1994, and is listed in Approval Letter #94-25. You requested clarification of these approvals to allow the VST-CV unit to be used on a VSTaflex whip hose assembly. This approval letter is intended to approve the VST-CV for use with the full length VSTaflex and VSTaflex whip hose assemblies.

The VST-CV safety check valve is built into the vapor coupling of a full length VSTaflex inverted coaxial hose assembly or a VSTaflex whip hose assembly. The unit remains open and "invisible" during normal operation, but closes and seals to prevent fuel spillage through the vapor passage into the nozzle spout should there be any malfunction or breach between the vapor and fuel lines. Activation of the safety check valve occurs only when catastrophic damage to the hose assembly occurs. The valve is installed in the hose assembly near the nozzle end connection (in a full length VSTaflex hose assembly) or near the breakaway connection (in a VSTaflex whip hose assembly) and is designed to operate only when the internal hose is subject to system pressure in the vapor area of the coaxial hose assembly. The valve does not effect the efficiency of the hose assembly and provides added protection from unwarranted or undesired fuel spillage through the vapor holes of the nozzle.

The VST-CV shall be installed on the nozzle end of a full length VSTaflex or the breakaway end of a VSTaflex whip hose assembly at the factory. No field installation of the unit is allowed. The hose assembly

shall have markings indicating nozzle end and dispenser end. The VSTaflex hose assembly shall be installed on the dispenser in conformity with the manufacturer's installation instructions and all applicable laws and regulations. As required by the California State Fire Marshal (CSFM), the listee's name "Vapor Systems Technologies, Inc." and the model name and number and Underwriters Laboratory mark shall be labeled on the hose ferrule and/or pressure stamped into the end couplings. The VSTaflex shall also have a label indicating that the VST-CV safety check valve is installed within it.

As required by the Air Resources Board certification procedures, you requested the approval of the Division of Occupational Safety and Health, the Office of the State Fire Marshal and the Department of Food and Agriculture, Division of Measurement Standards. The necessary approvals have been obtained from these agencies.

I find that the use of the VST-CV unit, when installed in accordance with the manufacturer's instructions and the conditions listed above, will not adversely affect the performance of the VSTaflex hose in which it is installed. Therefore the VST VST-CV safety check valve is certified for use with a full length VST VSTaflex inverted coaxial hose assembly or a VSTaflex whip hose assembly.

Should you have any questions or need further assistance, please contact Mr. Basharat Iqbal at (916) 324-7343 or Ms. Laura Sullivan McKinney at (916) 327-1525.

Sincerely,

James J. Morgester, Chief
Compliance Division

cc: Mr. Kenneth Kunaniec, Chairman,
CAPCOA Vapor Recovery Committee

Mr. Gary Hunter, Manager,
CARB Compliance Assistance Section